

FIG. 1

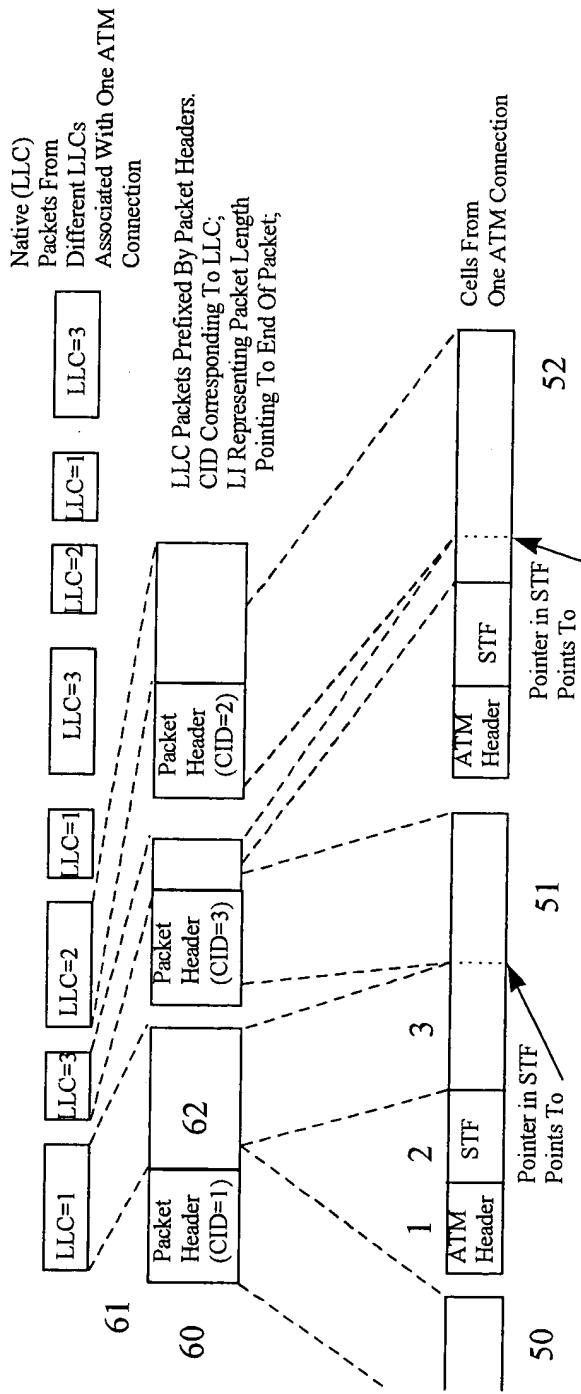
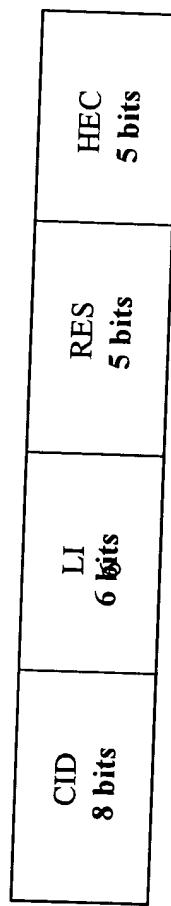
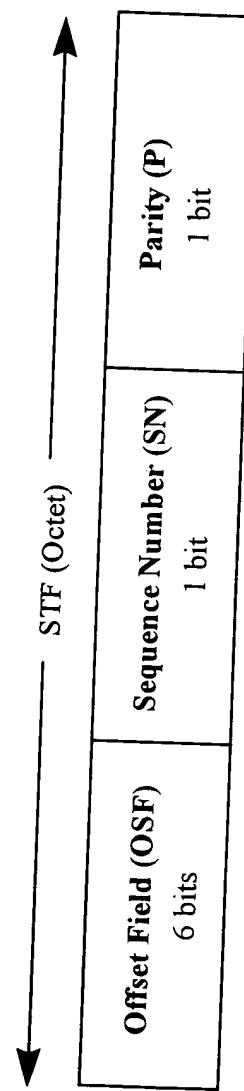


FIG. 2



Packet Header (3 octets)

FIG. 3



STF (Octet)

FIG. 4

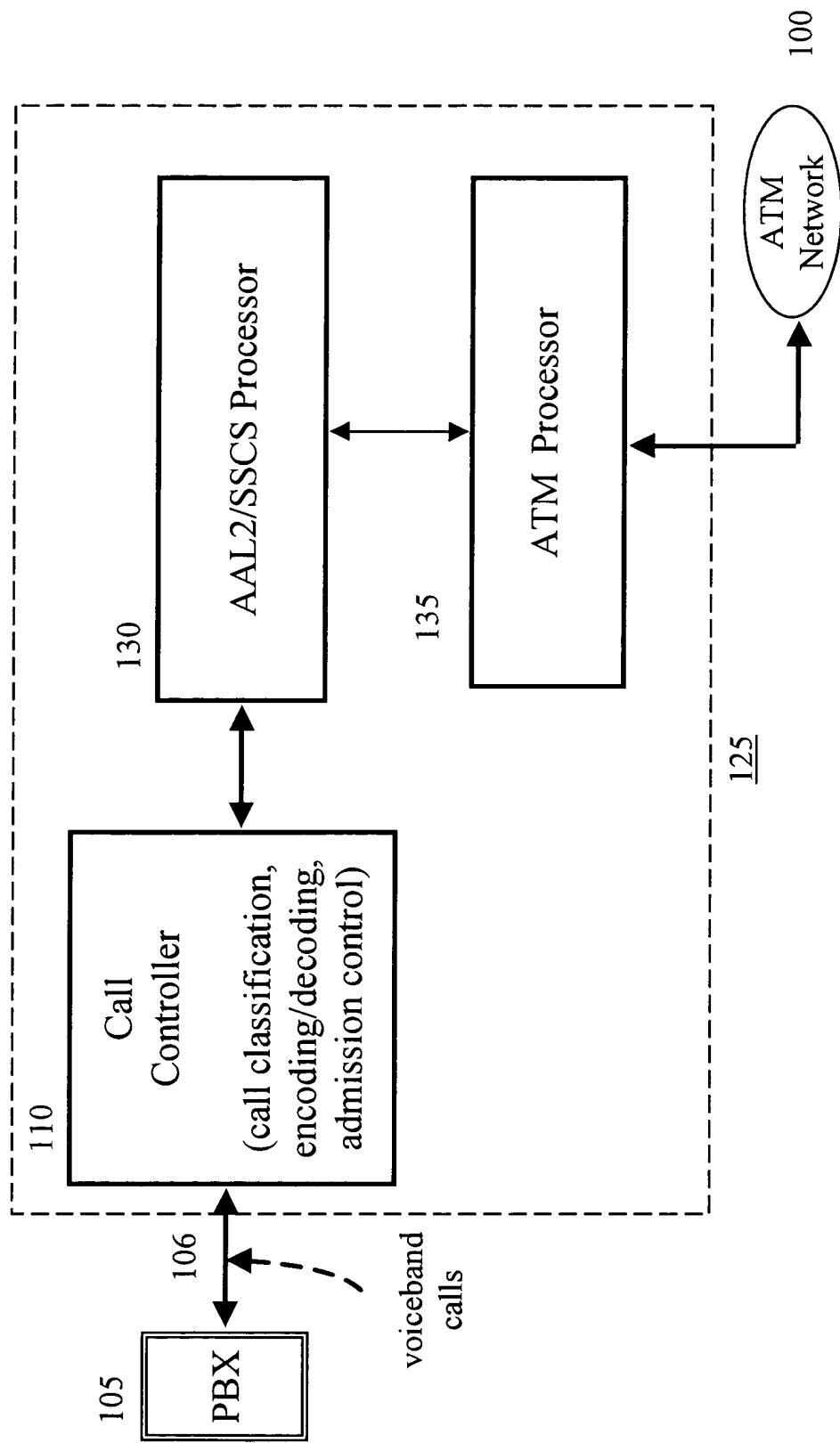


FIG. 5

TRAFFIC TYPES AND BANDWIDTH

<i>Call Type Identifier</i>	<i>Traffic Types</i>	<i>Bandwidth</i>	<i>Bandwidth including AAL2 overhead</i>	<i>Bandwidth including AAL2 and ATM overhead</i>
0	G.727 Voice with silence elimination	32 kb/s (peak) 14.7 kb/s (average)	36.8 kb/s (peak) 14.7 kb/s (average)	41.5 kb/s (peak) 16.6 kb/s (average)
1	14.4 kb/s modem	40 kb/s (?)	44.8 kb/s	50.5 kb/s
2	28.8 kb/s to 56 kb/s modem	64 kb/s	68.8 kb/s	77.6 kb/s
3	G3 Facsimile	9.6 kb/s	14.4 kb/s	16.2 kb/s

- Assuming 5 ms AAL2/SSCS packetization interval in all cases.
- Voice activity = 40 % (average talkspurt = 400 ms, and average silence = 600 ms).

FIG. 6

BLOCK (or BIT) DROPPING FOR CONGESTION CONTROL
INPUT BLOCK DROPPING: Block-Dropping at Input of AAL2 Queue

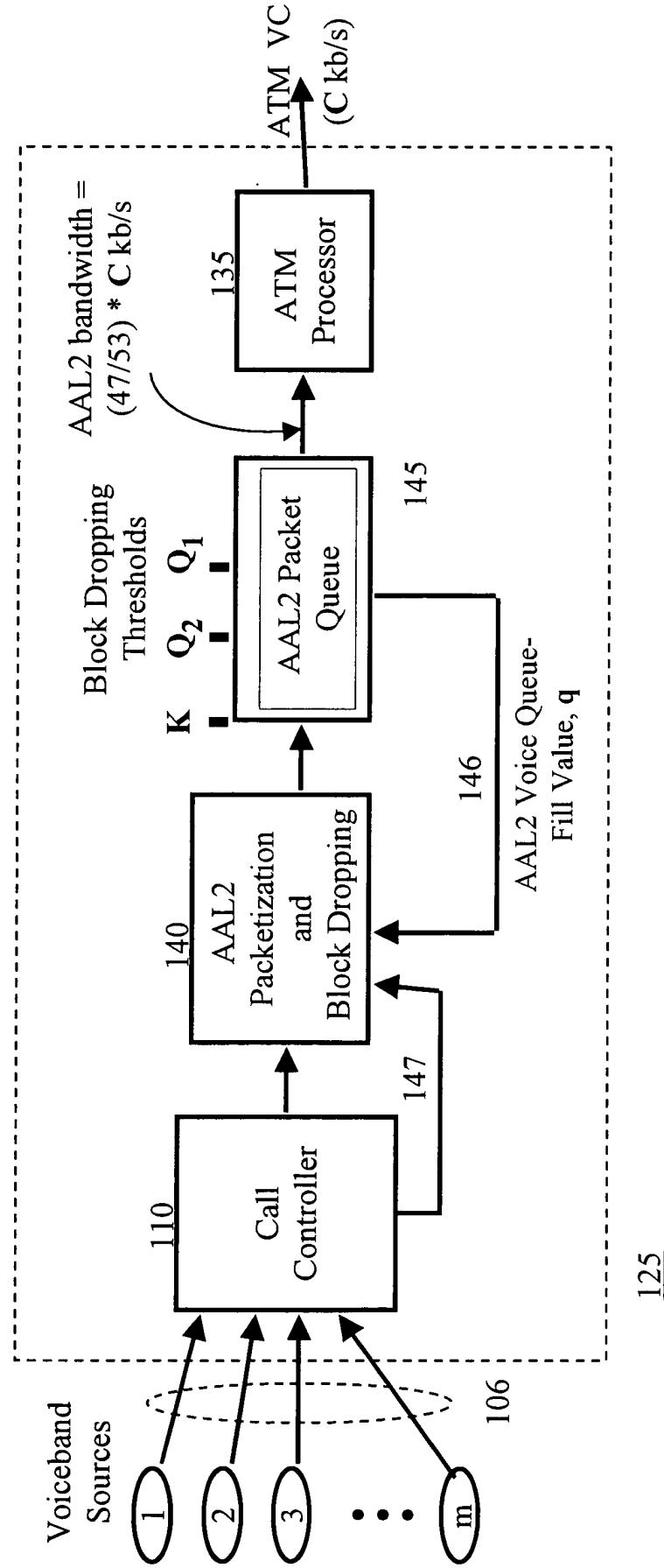


FIG. 7

EFFECTIVE BANDWIDTH (V_n) AND STATISTICAL MULTIPLEXING GAIN

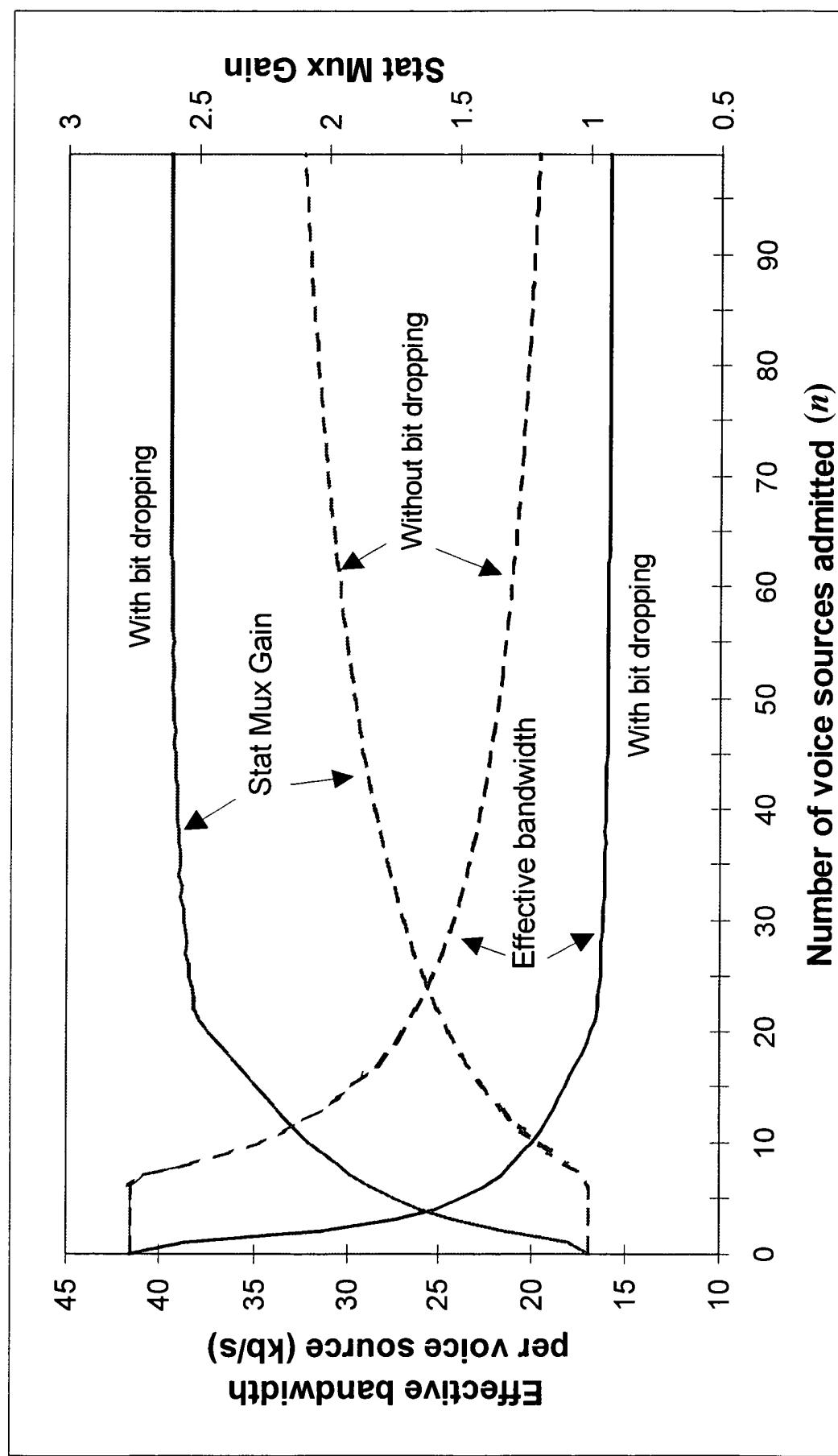


FIG. 8

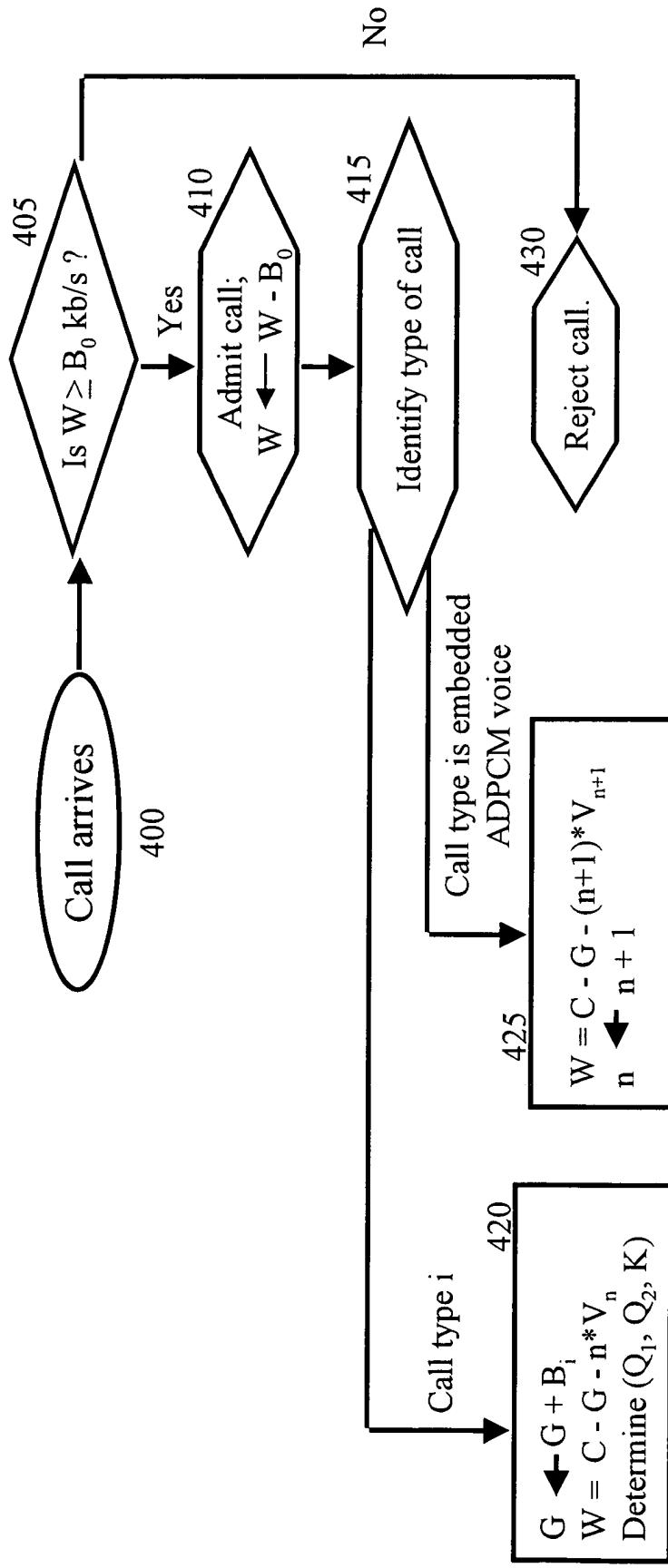


FIG. 9

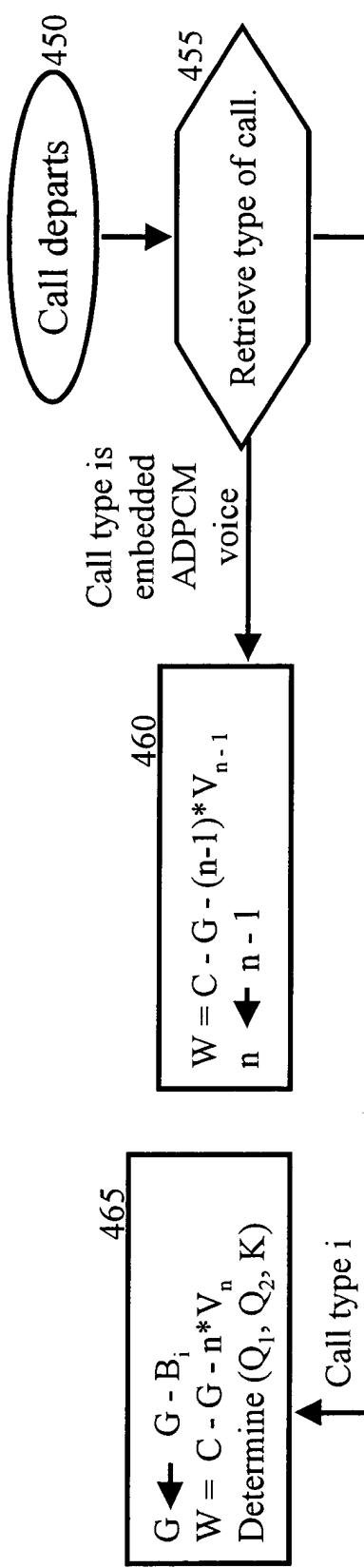


FIG. 10

ORGANIZATION OF VOICE PACKET

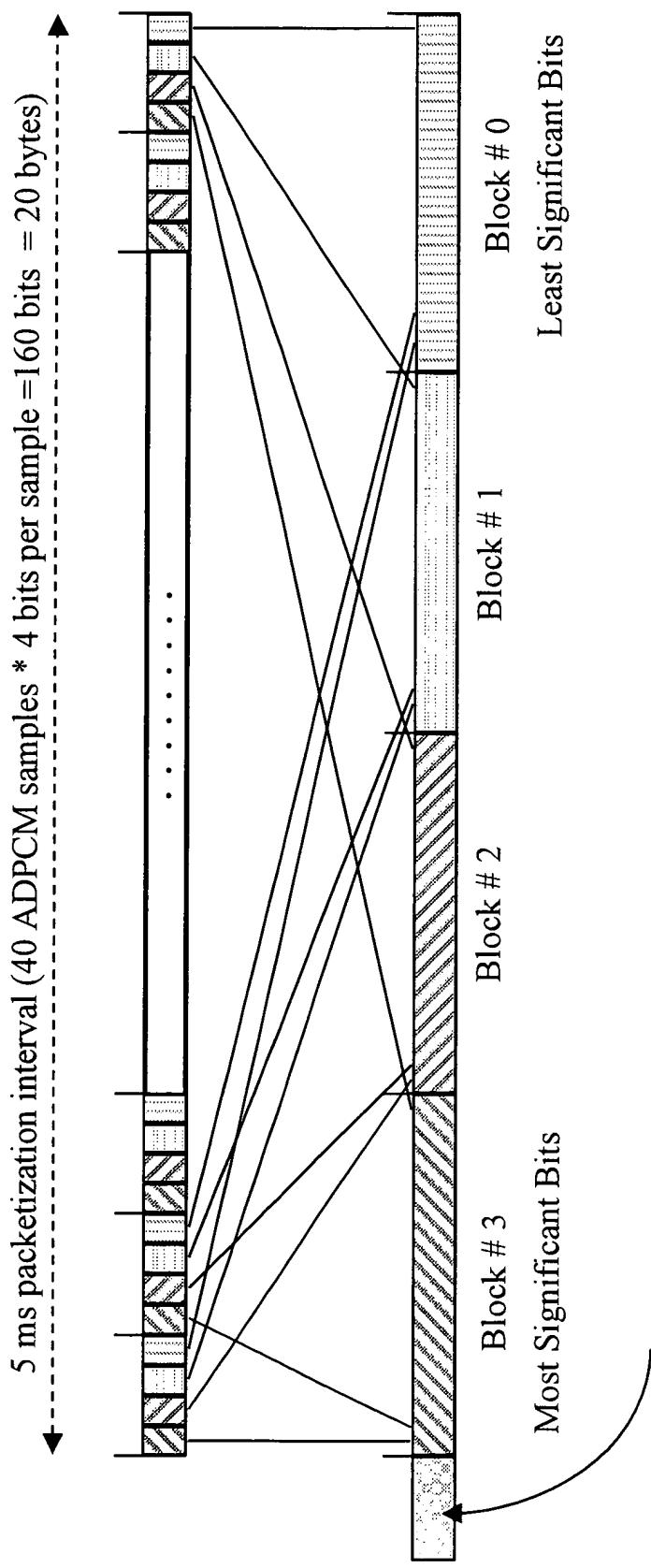


FIG. 11

Congestion State Table

Congestion State	Blocks Dropped from AAL2 Packet	Packet Size
Low ($0 \leq q \leq Q_1$)	None	23 bytes
Moderate ($Q_1 \leq q \leq Q_2$)	Block 0	18 bytes
High ($Q_2 \leq q \leq K-1$)	Blocks 0 and 1	13 bytes
Buffer Overflow ($q \geq K$)	Whole packet dropped	--

FIG. 12

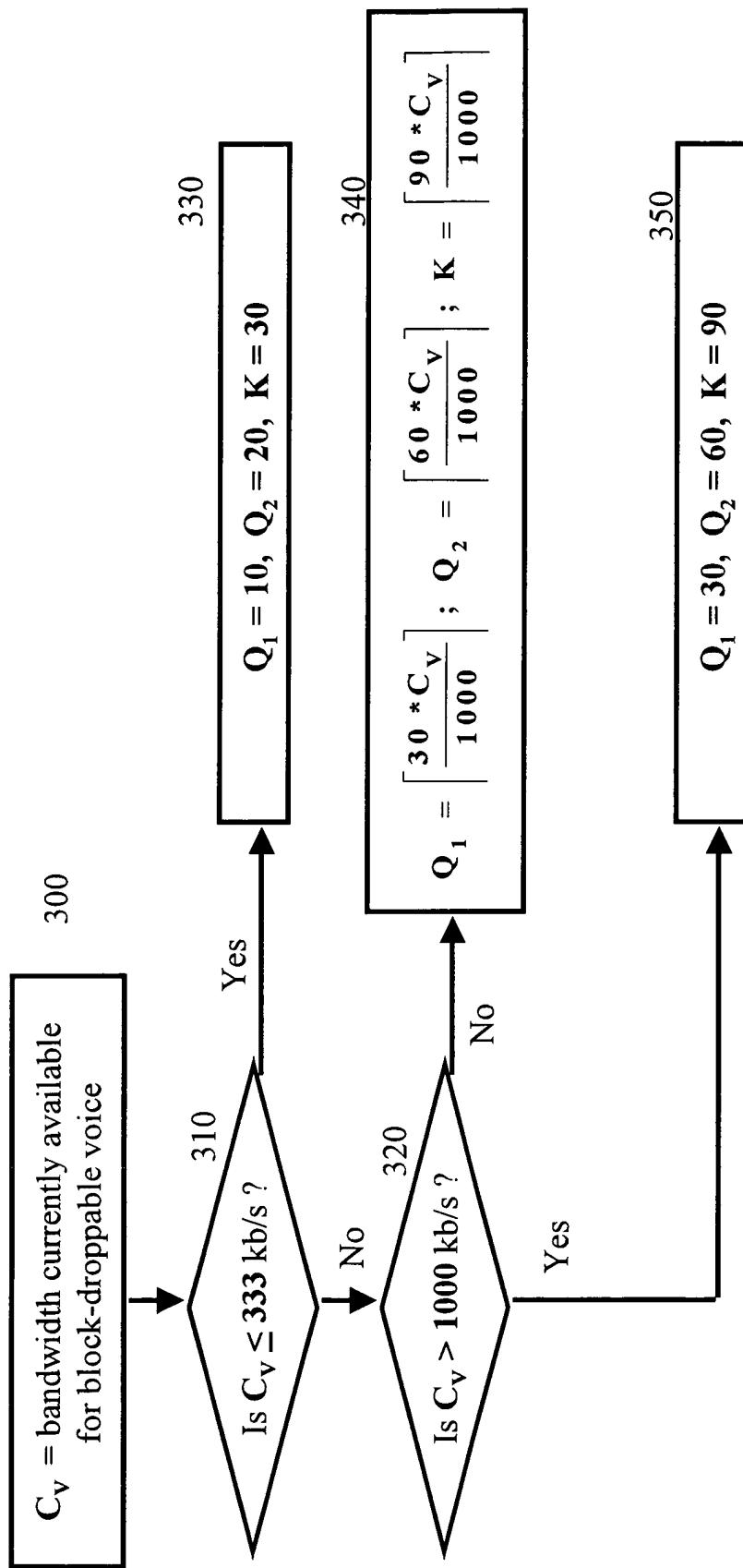


FIG. 13

BLOCK (or BIT) DROPPING FOR CONGESTION CONTROL
OUTPUT BLOCK DROPPING: Block-Dropping at Output of AAL2 Queue

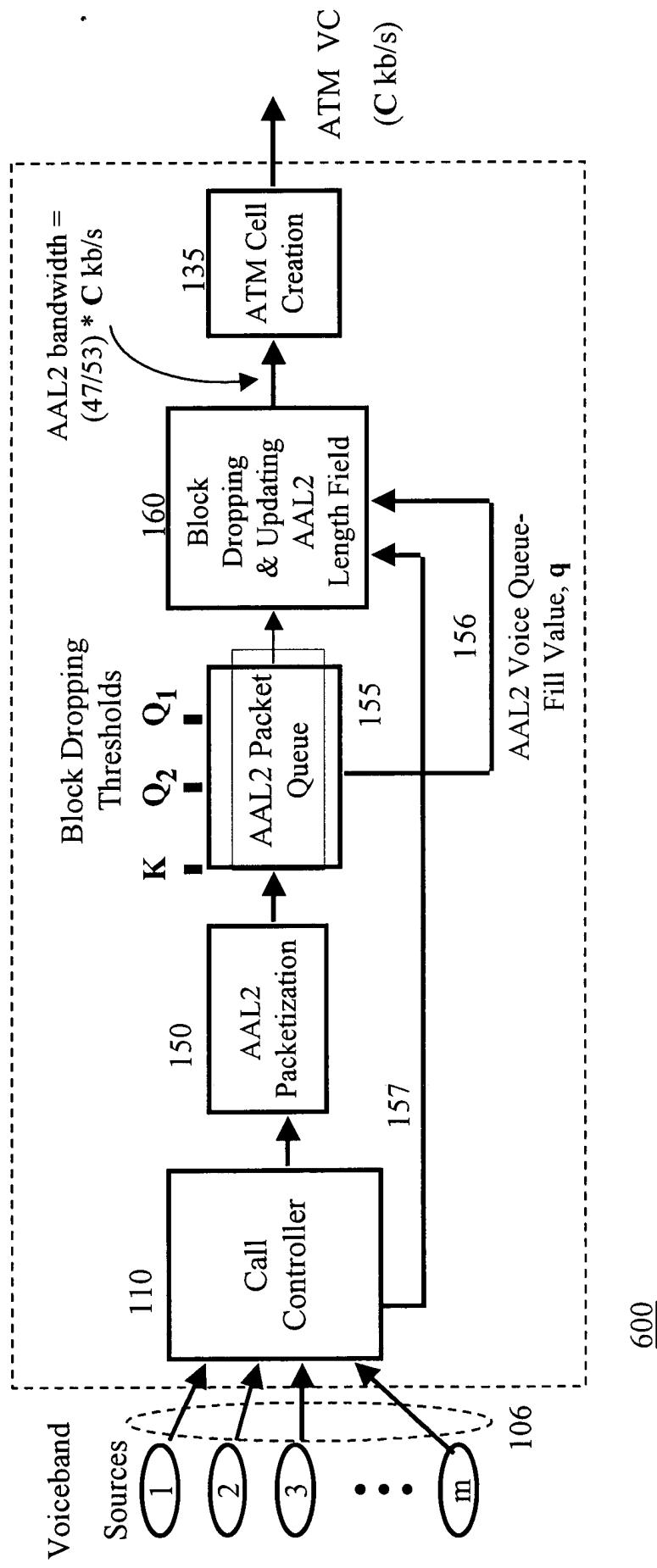


FIG. 14

BLOCK (or BIT) DROPPING FOR CONGESTION CONTROL

INPUT BLOCK DROPPING: Block-Dropping at Input of ATM Processor

